

IN THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) A computer, comprising: according to claim 1
a memory; and

a data structure to store a schema for a generic document, the data structure stored in the
memory and including:

a definition of a first element, the definition of the first element including an
element value field; and

a key identifier to identify a key value field to be used as a key in a data store,
wherein:

the definition of the first element includes a definition of a first attribute of
the first element, the definition of the first attribute including the key identifier;
and

the key identifier identifies the element value field as the key value field.

4. (Currently Amended) A computer according to claim 1 3, wherein the definition
of the first element includes a definition of a second attribute, the definition of the second
attribute including an attribute value field.

5. (Original) A computer according to claim 4, wherein:

the definition of the second attribute includes the key identifier as a property of the
second attribute; and

the key identifier identifies the attribute value field as the key value field.

6. (Original) A computer according to claim 4, wherein:
the definition of the first element further includes a definition of a third attribute of the
first element, the definition of the third attribute including the key identifier; and
the key identifier identifies the attribute value field of the second attribute as the key
value field.

7. (Currently Amended) A computer, comprising: according to claim 1,
a memory; and
a data structure to store a schema for a generic document, the data structure stored in the
memory and including:

a definition of a first element, the definition of the first element including an
element value field; and

a key identifier to identify a key value field to be used as a key in a data store,
wherein the data structure further includes:

a definition of a second element, the definition of the second element
including a second element value field; and

a tree structure including the first element and the second element.

8. (Currently Amended) A computer, comprising: according to claim 1,
a memory; and
a data structure to store a schema for a generic document, the data structure stored in the
memory and including:

a definition of a first element, the definition of the first element including an
element value field; and

a key identifier to identify a key value field to be used as a key in a data store,
wherein the key identifier identifies the key value field as one of a primary key, a
secondary key, and a foreign key for the data store.

9. (Original) A computer according to claim 8, wherein:
the key identifier identifies the key value field as a foreign key for the data store; and
the key identifier references a second data store.

10. through 12. (Cancelled)

13. (Currently Amended) A system, comprising: according to claim 11
a data store to store a first generic document and to store a value for a first key value
field, the value loaded from the first generic document; and

a first schema applicable to the first generic document, the first schema including:
a definition of a first element, the definition of the first element including an
element value field; and

a first key identifier to identify the first key value field in the first generic
document to be used as a key in a data store, wherein:

the definition of the first element includes a definition of a first attribute,
the definition of the first attribute including the first key identifier; and

the first key identifier identifies an element value field of the first element
as the first key value field.

14. (Currently Amended) A system according to claim 11 13, wherein the definition
of the first element includes a definition of a second attribute, the definition of the second
attribute including an attribute value field.

15. (Original) A system according to claim 14, wherein:

the definition of the second attribute includes the first key identifier as a property of the
second attribute; and

the first key identifier identifies the attribute value field as the first key value field.

16. (Original) A system according to claim 14, wherein:

the definition of the first element further includes a definition of a third attribute, the
definition of the third attribute including the first key identifier; and

the first key identifier identifies the attribute value field as the first key value field.

17. (Currently Amended) A system, comprising: according to claim 11
a data store to store a first generic document and to store a value for a first key value
field, the value loaded from the first generic document; and
a first schema applicable to the first generic document, the first schema including:
a definition of a first element, the definition of the first element including an
element value field; and
a first key identifier to identify the first key value field in the first generic
document to be used as a key in a data store, wherein:

the data store is operative to store a second generic document and to store
a second value for a second key value field, the value loaded from the first generic
document; and

the system further comprises a second schema applicable to the second
generic document, the second schema including:

a definition of a second element, the definition of the second
element including an element value field; and

a second key identifier to identify the second key value field in the
second generic document to be used as a key in a data store.

18. (Original) A system according to claim 17, wherein:
the first schema includes a first identifier for the first key value field;
the second schema includes a second identifier for the second key value field; and
the first identifier and the second identifier are the same identifier.

19. (Cancelled)

20. (Currently Amended) A system, comprising: according to claim 11, further comprising

a data store to store a first generic document and to store a value for a first key value field, the value loaded from the first generic document;

a first schema applicable to the first generic document, the first schema including:

a definition of a first element, the definition of the first element including an element value field; and

a first key identifier to identify the first key value field in the first generic document to be used as a key in a data store; and

a parser to parse the first schema.

21. (Currently Amended) A system according to claim 20, ~~further comprising~~ wherein:

the parser is operative to identify the first key value field in the schema; and

the system further comprises a loader to load a value from the first key value field in the first generic document.

22. (Previously Presented) A system according to claim 21, wherein the data store further includes an index associated with the first generic document, the index storing a copy of the value from the first key value field in the first generic document.

23. (Original) A system according to claim 22, wherein the index is in a native format of the data store.

24. (Previously Presented) A system according to claim 21, wherein:

the schema includes a definition of at least one of a second element and a fourth attribute;

the parser is operative to identify the second element or the fourth attribute;

the loader is operative to load a second value from the second element or the fourth attribute in the first generic document; and

the data store further includes a field to store the second value in a native format of the data store.

25. (Original) A system according to claim 20, wherein:
the parser is operative to parse the schema into objects; and
the system further comprises a definer to define a structure for the data store based on the
objects.

26. (Currently Amended) A system, comprising: ~~according to claim 11~~
~~a data store to store a first generic document and to store a value for a first key value~~
~~field, the value loaded from the first generic document; and~~
~~a first schema applicable to the first generic document, the first schema including:~~
~~a definition of a first element, the definition of the first element including an~~
~~element value field; and~~
~~a first key identifier to identify the first key value field in the first generic~~
~~document to be used as a key in a data store, wherein:~~
the first generic document is an eXtensible Markup Language (XML)
document; and
the first schema is an XML schema.

27. through 64. (Cancelled)

65. (New) A computer according to claim 7, wherein:
the definition of the first element includes a definition of a first attribute of the first
element, the definition of the first attribute including the key identifier; and
the key identifier identifies the element value field as the key value field.

66. (New) A computer according to claim 65, wherein the definition of the first
element includes a definition of a second attribute, the definition of the second attribute
including an attribute value field.

67. (New) A computer according to claim 66, wherein:

the definition of the second attribute includes the key identifier as a property of the second attribute; and

the key identifier identifies the attribute value field as the key value field.

68. (New) A computer according to claim 66, wherein:

the definition of the first element further includes a definition of a third attribute of the first element, the definition of the third attribute including the key identifier; and

the key identifier identifies the attribute value field of the second attribute as the key value field.

69. (New) A computer according to claim 7, wherein the key identifier identifies the key value field as one of a primary key, a secondary key, and a foreign key for the data store.

70. (New) A computer according to claim 69, wherein:

the key identifier identifies the key value field as a foreign key for the data store; and
the key identifier references a second data store.

71. (New) A computer according to claim 8, wherein:

the definition of the first element includes a definition of a first attribute of the first element, the definition of the first attribute including the key identifier; and

the key identifier identifies the element value field as the key value field.

72. (New) A computer according to claim 71, wherein the definition of the first element includes a definition of a second attribute, the definition of the second attribute including an attribute value field.

73. (New) A computer according to claim 72, wherein:

the definition of the second attribute includes the key identifier as a property of the second attribute; and

the key identifier identifies the attribute value field as the key value field.

74. (New) A computer according to claim 72, wherein:

the definition of the first element further includes a definition of a third attribute of the first element, the definition of the third attribute including the key identifier; and
the key identifier identifies the attribute value field of the second attribute as the key value field.

75. (New) A system according to claim 13, wherein:

the first schema includes a first identifier for the first key value field;
the second schema includes a second identifier for the second key value field; and
the first identifier and the second identifier are the same identifier.

76. (New) A system according to claim 13, wherein:

the parser is operative to parse the schema into objects; and
the system further comprises a definer to define a structure for the data store based on the objects.

77. (New) A system according to claim 13, wherein:

the parser is operative to identify the first key value field in the schema; and
the system further comprises a loader to load a value from the first key value field in the first generic document.

78. (New) A system according to claim 77, wherein:

the schema includes a definition of at least one of a second element and a fourth attribute;
the parser is operative to identify the second element or the fourth attribute;
the loader is operative to load a second value from the second element or the fourth attribute in the first generic document; and
the data store further includes a field to store the second value in a native format of the data store.

79. (New) A system according to claim 77, wherein the data store further includes an index associated with the first generic document, the index storing a copy of the value from the first key value field in the first generic document.

80. (New) A system according to claim 79, wherein the index is in a native format of the data store.

81. (New) A system according to claim 17, wherein:

the definition of the first element includes a definition of a first attribute, the definition of the first attribute including the first key identifier; and

the first key identifier identifies an element value field of the first element as the first key value field.

82. (New) A system according to claim 81, wherein the definition of the first element includes a definition of a second attribute, the definition of the second attribute including an attribute value field.

83. (New) A system according to claim 82, wherein:

the definition of the second attribute includes the first key identifier as a property of the second attribute; and

the first key identifier identifies the attribute value field as the first key value field.

84. (New) A system according to claim 82, wherein:

the definition of the first element further includes a definition of a third attribute, the definition of the third attribute including the first key identifier; and

the first key identifier identifies the attribute value field as the first key value field.

85. (New) A system according to claim 17, further comprising a parser to parse the first schema.

86. (New) A system according to claim 85, wherein:
the parser is operative to identify the first key value field in the schema; and
the system further comprises a loader to load a value from the first key value field in the first generic document.

87. (New) A system according to claim 85, wherein:
the parser is operative to parse the schema into objects; and
the system further comprises a definer to define a structure for the data store based on the objects.

88. (New) A system according to claim 86, wherein the data store further includes an index associated with the first generic document, the index storing a copy of the value from the first key value field in the first generic document.

89. (New) A system according to claim 86, wherein:
the schema includes a definition of at least one of a second element and a fourth attribute;
the parser is operative to identify the second element or the fourth attribute;
the loader is operative to load a second value from the second element or the fourth attribute in the first generic document; and
the data store further includes a field to store the second value in a native format of the data store.

90. (New) A system according to claim 87, wherein the index is in a native format of the data store.

91. (New) A system according to claim 3, wherein:
the key identifier identifies the key value field as a foreign key for the data store; and
the key identifier references a second data store.

92. (New) A system according to claim 20, wherein:

the definition of the first element includes a definition of a first attribute, the definition of the first attribute including the first key identifier; and

the first key identifier identifies an element value field of the first element as the first key value field.

93. (New) A system according to claim 92, wherein the definition of the first element includes a definition of a second attribute, the definition of the second attribute including an attribute value field.

94. (New) A system according to claim 93, wherein:

the definition of the second attribute includes the first key identifier as a property of the second attribute; and

the first key identifier identifies the attribute value field as the first key value field.

95. (New) A system according to claim 93, wherein:

the definition of the first element further includes a definition of a third attribute, the definition of the third attribute including the first key identifier; and

the first key identifier identifies the attribute value field as the first key value field.

96. (New) A system according to claim 26, wherein:

the data store is operative to store a second generic document and to store a second value for a second key value field, the value loaded from the first generic document; and

the system further comprises a second schema applicable to the second generic document, the second schema including:

a definition of a second element, the definition of the second element including an element value field;

a second key identifier to identify the second key value field in the second generic document to be used as a key in a data store.

97. (New) A system according to claim 96, wherein:
the first schema includes a first identifier for the first key value field;
the second schema includes a second identifier for the second key value field; and
the first identifier and the second identifier are the same identifier.

98. (New) A system according to claim 26, wherein:
the definition of the first element includes a definition of a first attribute, the definition of the first attribute including the first key identifier; and
the first key identifier identifies an element value field of the first element as the first key value field.

99. (New) A system according to claim 98, wherein the definition of the first element includes a definition of a second attribute, the definition of the second attribute including an attribute value field.

100. (New) A computer according to claim 99, wherein:
the definition of the second attribute includes the key identifier as a property of the second attribute; and
the key identifier identifies the attribute value field as the key value field.

101. (New) A system according to claim 99, wherein:
the definition of the first element further includes a definition of a third attribute, the definition of the third attribute including the first key identifier; and
the first key identifier identifies the attribute value field as the first key value field.

102. (New) A system according to claim 26, further comprising a parser to parse the first schema.

103. (New) A system according to claim 102, wherein:
the parser is operative to parse the schema into objects; and
the system further comprises a definer to define a structure for the data store based on the objects.

104. (New) A system according to claim 102, wherein:
the parser is operative to identify the first key value field in the schema; and
the system further comprises a loader to load a value from the first key value field in the first generic document.

105. (New) A system according to claim 104, wherein the data store further includes an index associated with the first generic document, the index storing a copy of the value from the first key value field in the first generic document.

106. (New) A system according to claim 104, wherein:
the schema includes a definition of at least one of a second element and a fourth attribute;
the parser is operative to identify the second element or the fourth attribute;
the loader is operative to load a second value from the second element or the fourth attribute in the first generic document; and
the data store further includes a field to store the second value in a native format of the data store.

107. (New) A system according to claim 105, wherein the index is in a native format of the data store.